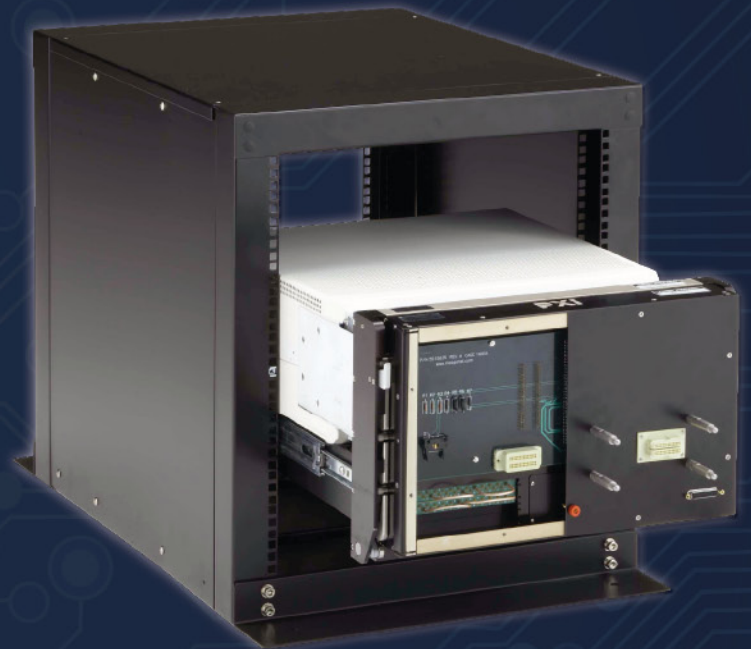# SCOUT

Next Generation Mass Interconnect

Specifically designed to deliver the full performance of the PXI platform.

NEW!
Wireless ITAs

28 Slot SCOUT Interface mounted on NI PXI-1045 Chassis
(shown with Interchangeable Test Adapter unmounted)

28 Slot SCOUT Interface mounted on NI PXI-1045 Chassis
(shown with Interchangeable Test Adapter mounted)

◎ **Reduce Integration Time**
Integrate in hours, not days or weeks

◎ **Improve Signal Integrity**
PCB or flex-circuits replace cabling

◎ **Enhance Performance**
Add active circuitry to DAK PCBs

◎ **Lowest Cost of Ownership**
Simplified maintenance, upgrade, etc.

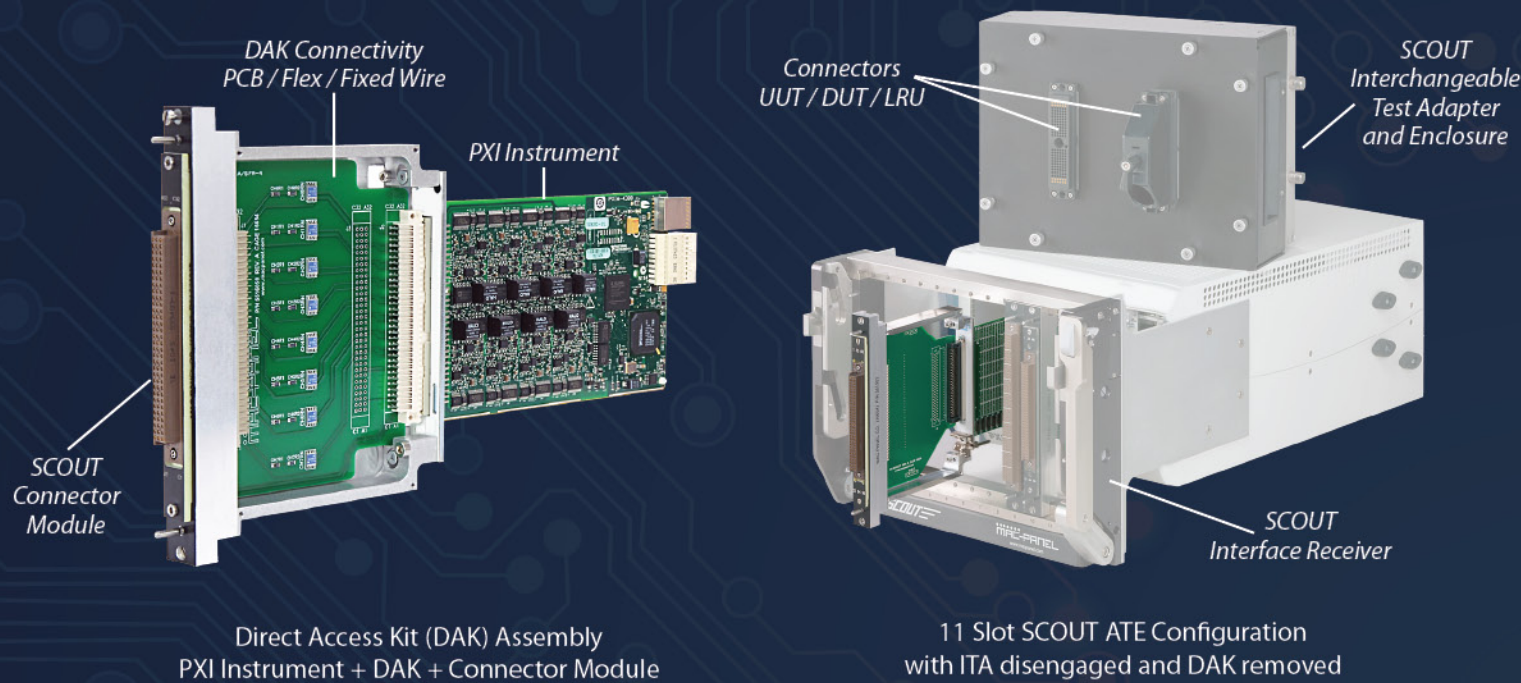◎ **Pre Engineered Solutions**
Reduce engineering costs and time

PXi

MAC-PANEL
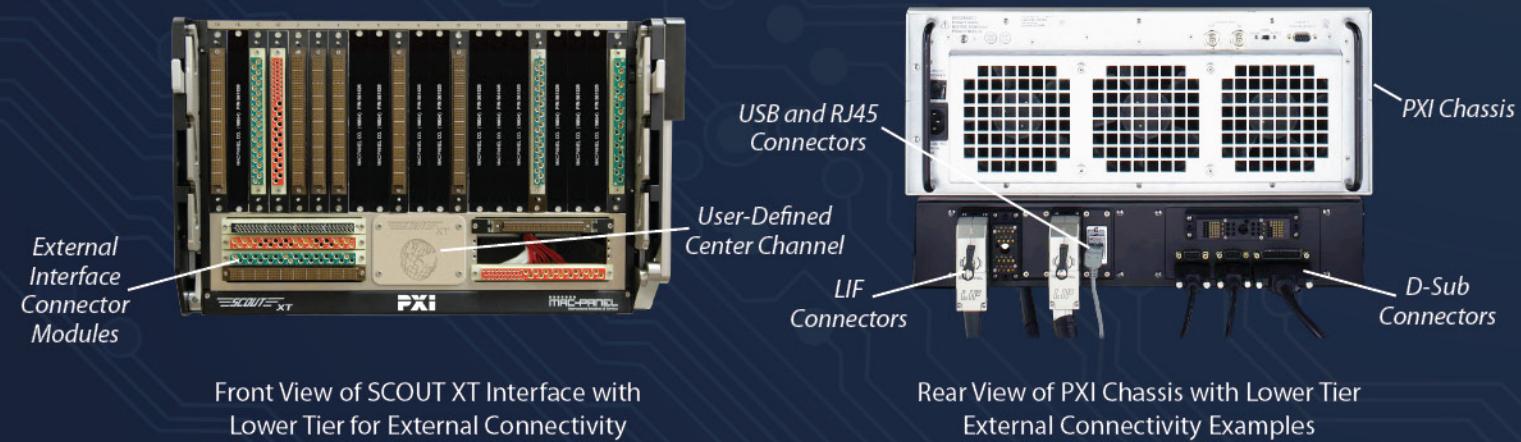*Interconnect Solutions & Services*

PXi

Superior Performance

SCOUT is an innovative pull-thru interconnect solution designed to connect PXI instrumentation to a robust, high life cycle connector interface. SCOUT utilizes Direct Access Kits (DAKs) to provide fully enclosed PCB or fixed-wire connectivity, enabling system designers to eliminate conventional cabling that often plagues traditional ATE. **The result is increased performance with a far higher degree of system stability and up-time.**

DAK Connectivity
PCB / Flex / Fixed Wire

PXI Instrument

Connectors
UUT / DUT / LRU

SCOUT
Interchangeable
Test Adapter
and Enclosure

SCOUT
Connector
Module

SCOUT
Interface Receiver

Direct Access Kit (DAK) Assembly
PXI Instrument + DAK + Connector Module

11 Slot SCOUT ATE Configuration
with ITA disengaged and DAK removed

Cross Platform Support

SCOUT provides an ideal solution for PXI based ATE that also require assets from other platforms. All SCOUT variants include **External Wiring Slots** that easily accommodate I/O from instrumentation external to the chassis. SCOUT XT includes an additional lower tier with 8 connector module locations **PLUS** a custom center channel for additional user defined I/O.
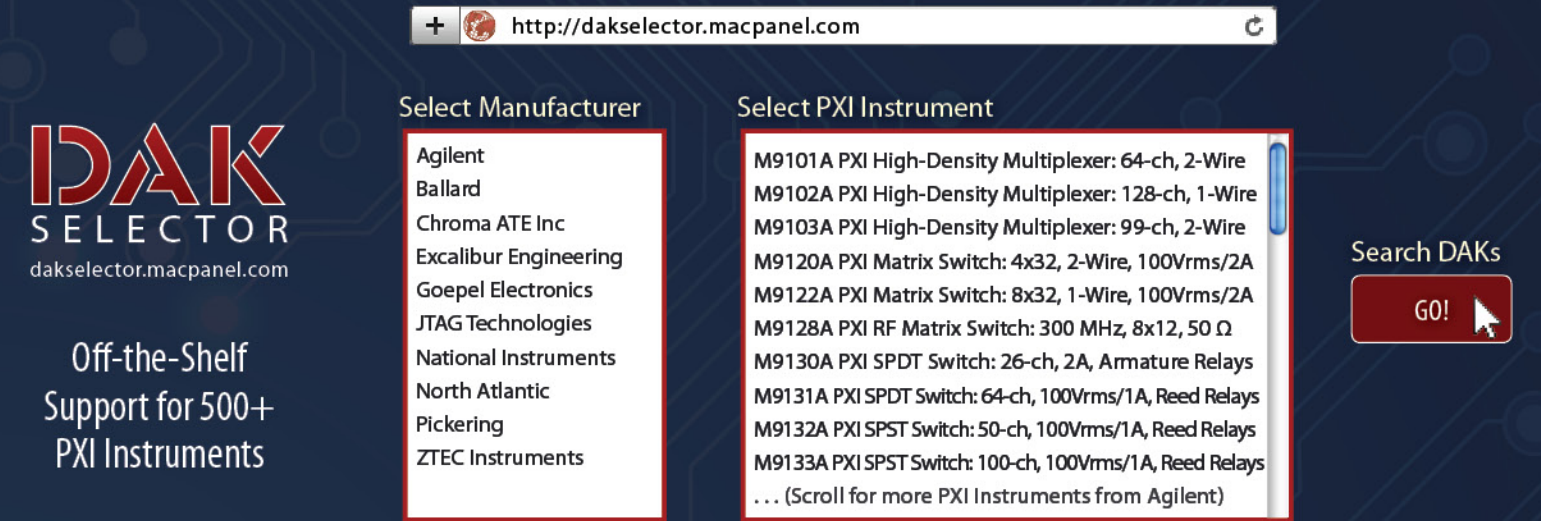

USB and RJ45
Connectors

PXI Chassis

External
Interface
Connector
Modules

User-Defined
Center Channel

LIF
Connectors

D-Sub
Connectors

Front View of SCOUT XT Interface with
Lower Tier for External Connectivity

Rear View of PXI Chassis with Lower Tier
External Connectivity Examples

Unprecedented Modularity

Simply remove a DAK Assembly and replace it with another **OR** swap a DAK Assembly between multiple systems. In both cases, the process is typically completed in a matter of minutes with no adverse impact on the ATE – **the system capacitance signature remains unaffected.** The opposite is true of conventional cable based ATE solutions where instrument removal can take hours and typically requires a system calibration upon completion.

Unparalleled Support for PXI

Pre-engineered DAK solutions are currently available for over 500 PXI Instruments. Using the DAK Selector utility, simply specify your PXI Instrument for a complete listing of all DAKs compatible with your instrument.

http://dakselector.macpanel.com

DAK SELECTOR
dakselector.macpanel.com

Off-the-Shelf
Support for 500+
PXI Instruments

Select Manufacturer

Agilent
Ballard
Chroma ATE Inc
Excalibur Engineering
Goepel Electronics
JTAG Technologies
National Instruments
North Atlantic
Pickering
ZTEC Instruments

Select PXI Instrument

M9101A PXI High-Density Multiplexer: 64-ch, 2-Wire
M9102A PXI High-Density Multiplexer: 128-ch, 1-Wire
M9103A PXI High-Density Multiplexer: 99-ch, 2-Wire
M9120A PXI Matrix Switch: 4x32, 2-Wire, 100Vrms/2A
M9122A PXI Matrix Switch: 8x32, 1-Wire, 100Vrms/2A
M9128A PXI RF Matrix Switch: 300 MHz, 8x12, 50 Ω
M9130A PXI SPDT Switch: 26-ch, 2A, Armature Relays
M9131A PXI SPDT Switch: 64-ch, 100Vrms/1A, Reed Relays
M9132A PXI SPST Switch: 50-ch, 100Vrms/1A, Reed Relays
M9133A PXI SPST Switch: 100-ch, 100Vrms/1A, Reed Relays
. . . (Scroll for more PXI Instruments from Agilent)
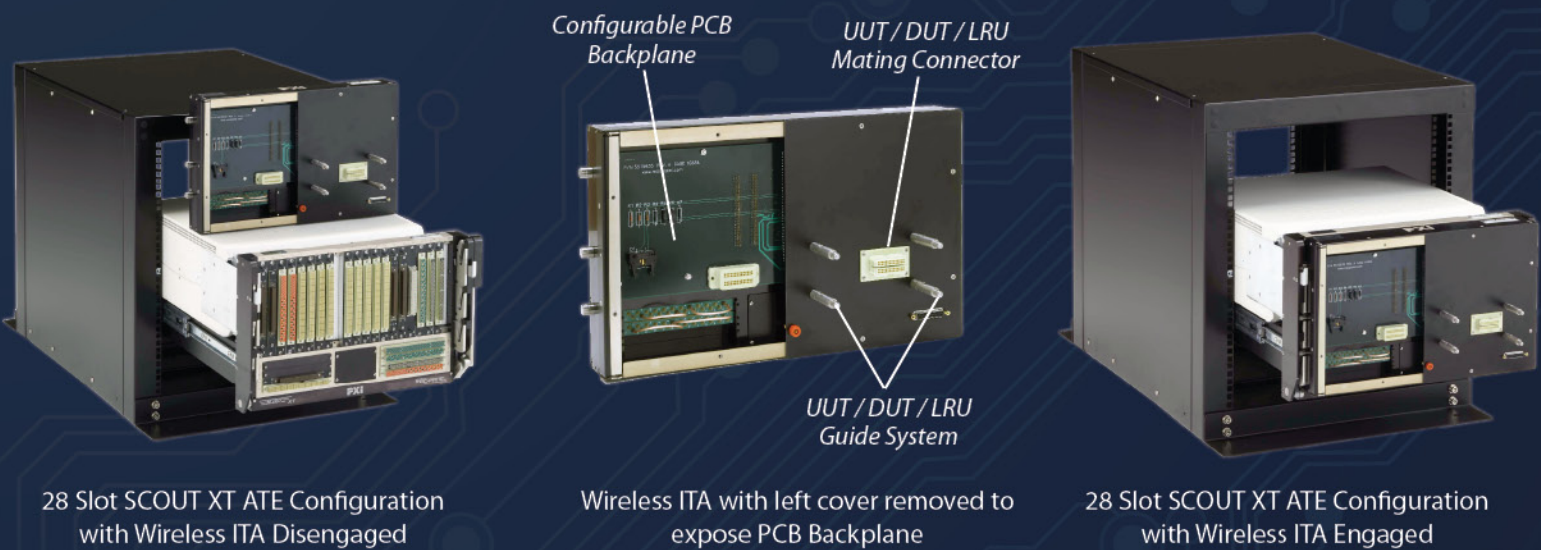
Search DAKs

GO!

Lowest Cost of Ownership

SCOUT systems are initially configured at a price comparable to traditional cable based solutions, **BUT** the cost of integrating and maintaining a SCOUT system is **ALWAYS** much lower. Complex PXI ATE can be integrated in a matter of hours where conventional solutions can take weeks. Furthermore, all DAK modules are COTS, saving costly engineering and documentation time - **these costs savings will continue throughout the life of the system.**

Wireless Test Adapters - The Ultimate Turn Key Solution - NEW!

Pair a wireless Test Adapter with a SCOUT interface utilizing PCB DAKs to create an ideal wireless interconnection solution between your PXI instrumentation and the UUT / DUT / LRU.

Configurable PCB
Backplane

UUT / DUT / LRU
Mating Connector

UUT / DUT / LRU
Guide System

28 Slot SCOUT XT ATE Configuration
with Wireless ITA Disengaged

Wireless ITA with left cover removed to
expose PCB Backplane

28 Slot SCOUT XT ATE Configuration
with Wireless ITA Engaged

Wireless Test Adapters feature an integral PCB backplane providing wireless connectivity between the SCOUT interface and the UUT / DUT / LRU. This configurable backplane provides I/O signal mapping between the appropriate module/instrument resource pairs through matrix switching to the prescribed contacts of the UUT connector. On multiple projects where a SCOUT Interface + Wireless ITA configuration was deployed, **95% of discrete wiring was sucessfully eliminated from the ITA.**

Exceptional Configurability

SCOUT Interfaces are available for benchtop or rack and stack PXI ATE configurations and are compatible with a range of high performance connector modules and contact sets. Find a complete listing of all SCOUT components online at **macpanel.com.**
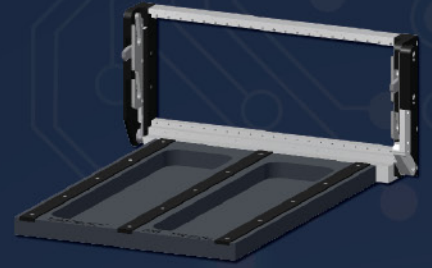
11 Slot Interface

✓Fits Standard 8 Slot PXI Chassis
✓Ideal for Benchtop Applications
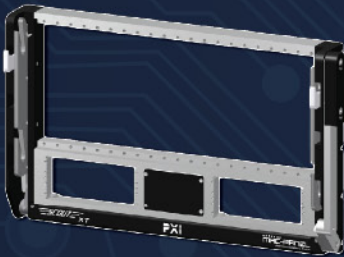✓Up to 2,200 I/O Points

21 Slot Interface

✓Fits Standard 18 Slot PXI Chassis
✓Benchtop or Rack Mount Applications
✓Up to 4,200 I/O Points

21 Slot Interface with Integral Table

✓Support ITAs while Disengaged
✓Promotes Proper ITA Alignment
✓Engage / Disengage Directly from Table

28 Slot XT Interface

✓Fits 18 Slot PXI Chassis Plus XT Lower Tier
✓Access Non-PXI Instrumentation
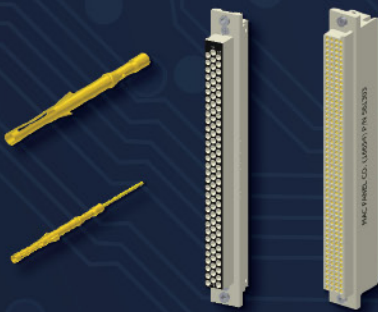✓Up to 5,800 I/O Points

28 Slot XT Interface With Integral Table
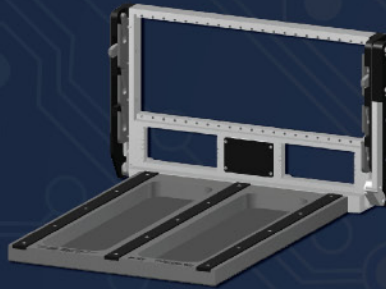
✓Support ITAs while Disengaged
✓Promotes Proper ITA Alignment
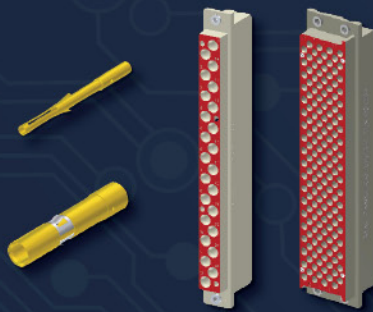✓Engage / Disengage Directly from Table

42 Slot Dual Tier Interface

✓Supports Dual PXI 18-Slot Chassis'
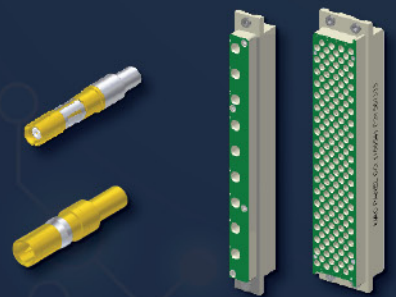✓Easy Access via Slide Shelves
✓Up to 8,400 I/O Points

Signal Components

✓Contacts Support up to 5 Amps Max
✓Modules Range from 96 to 200 Positions/Slot

Power Components

✓Contacts Support up to 50 Amps Max
✓Modules Range from 24 to 152 Positions/Slot

Coax Components

✓Contacts Support up to DC-40 GHz
✓Modules Range from 6 to 152 Positions/Slot

Go to macpanel.com/enhance
Learn more about how SCOUT + Direct Access can enhance and differentiate your PXI ATE Instrumentation

PXI

MAC-PANEL
Interconnect Solutions & Services

PXI